SOA　　　November2001Course8P PDF

https://www.100test.com/kao_ti2020/84/2021_2022_SOA_E7_9C_
9F_E9_A2_98N_c50_84041.htm COURSE 8: November 2001 - 1 -
GO TO NEXT PAGERetirement Benefits,Pension Funding
Mathematics SegmentNovember, 2001- Course 8PSociety of
Actuaries**BEGINNING OF EXAMINATION**1. (8 points) A
new Company has established a contributory pension plan on
January 1, 2001. You are given:Plan ProvisionsRetirement benefit:
The greater of:(i) 2% of career average earnings, or(ii) actuarial
equivalent of 200% of employeecontributions accumulated at the
fundrate of returnNormal form of payment: 5 years certain and life
thereafter, payable monthlyin advanceNormal retirement age:
65Employee contributions: 4% of annual earnings, payable at the
beginning ofthe yearTermination or death benefit: Lump sum
payment of 200% of employeecontributions accumulated at the fund
rate of returnActuarial equivalence: At valuation
assumptionsActuarial Assumptions and MethodsInterest rate: 6.5%
per annumRetirement age: 65Salary increases: 4.0% per
annumTermination rates: Attained Age Year-end ratesUp to 34
10%35 and over 0%Other pre-retirement decrements:
NoneActuarial cost method: Unit CreditActuarial value of assets:
Market valueamp.:a 10.4655b12g amp. &amp. a65b12g 9.0 11.0(a)
Calculate the normal cost for the Basic Plan at January 1, 2001.(b)
Calculate the normal cost for the Supplemental Plan at January 1,
2001.Show all work.COURSE 8: November 2001 - 5 - GO TO